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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/711,908		10/12/2004	Paul A. Bogdans	71368-0075	5907	
20915	7590	12/12/2005		EXAMINER		
MCGARR'	Y BAIR	PC	PHAN, THO GIA			
171 MONRO	DE AVEN	NUE, N.W.	ART UNIT	PAPER NUMBER		
SUITE 600			ARTONII	FAFER NUMBER		
GRAND RA	APIDS, M	1I 49503	2821			
				DATE MAILED: 12/12/2004	DATE MAILED: 12/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applica	tion No.	Applicant(s)						
		10/711,	908	BOGDANS ET AL	L.					
Office Action Summary			er	Art Unit						
		Tho G. f		2821	-					
Period fo	The MAILING DATE of this communi r Reply	cation appears on t	he cover sheet	with the correspondence a	ddress					
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MANSIONS of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this common period for reply is specified above, the maximum state to reply within the set or extended period for reply eply received by the Office later than three months are departed term adjustment. See 37 CFR 1.704(b).	AILING DATE OF Tof 37 CFR 1.136(a). In no cunication. tutory period will apply and will, by statute, cause the a	THIS COMMU event, however, may will expire SIX (6) N pplication to become	NICATION.  If a reply be timely filed  IONTHS from the mailing date of this of a ABANDONED (35 U.S.C. § 133).	/					
Status										
1)⊠	Responsive to communication(s) file	d on 12 October 20	004.							
'=	This action is <b>FINAL</b> . 2b) $\boxtimes$ This action is non-final.									
,	Since this application is in condition	,		atters, prosecution as to the	e merits is					
<i>,</i> —	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.									
Dispositi	on of Claims									
5)□ 6)⊠	4) ⊠ Claim(s) <u>1-8</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) <u>1-8</u> is/are rejected.									
•	☐ Claim(s) is/are objected to. ☐ Claim(s) are subject to restriction and/or election requirement.									
Applicati	on Papers									
9)[	The specification is objected to by the	e Examiner.								
10)	The drawing(s) filed on is/are:	a) accepted or	b) objected	to by the Examiner.						
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11)[	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	ınder 35 U.S.C. § 119									
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>										
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P' nation Disclosure Statement(s) (PTO-1449 or r No(s)/Mail Date		Paper I	w Summary (PTO-413) No(s)/Mail Date of Informal Patent Application (PT	O-152)					

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### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, line 1, the language, "the heat sink" lacks a proper antecedent basis.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solberg et al (6,249,261) in view of Aslan (4,789,869).

Solberg et al in figures 1-7 disclose a mobile antenna comprising a center-fed, broadband, dipole radiator 202, and a coupler 206 assembly for mounting the dipole radiator to a mount 203. Solberg et al have been discussed but fail to teach the power matching circuit comprises a capacitor, the power matching circuit comprises a resistor and a capacitor connected in series/ parallel and a plurality of power matching circuits. However, Aslan in figures 6-8 discloses the power matching circuit comprises a capacitor, the power matching circuit comprises a resistor

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and a capacitor connected in parallel (figure 6). It would have been obvious choice to employ the power matching circuit comprises a capacitor, the power matching circuit comprises a resistor and a capacitor connected in series/parallel and a plurality of power matching circuits into Solberg et al for the purpose of maintaining a balance of current distribution and improving the antenna gain.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Solberg et al modified by Aslan and further-in-view of Podell et al (5,280,412).

Solberg et al modified by Aslan have been discussed above but fail to teach a heat sink assembly. However, Podell et al in figures 1-3 discloses the heat sink assembly 20/20c. It would have been obvious choice to employ the heat sink assembly as taught by Podell et al for the purpose of conducting heat.

# Allowable Subject Matter

6. Claims 7-8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to Erat, Aslan, Unwin, Kaegebein and Mertel are cited as of interested and illustrated a similar structure to a dipole antenna assembly.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho G. Phan whose telephone number is 571-272-1826. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tho G Phan
Primary Examiner
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